

CLAIMS

I Claim:

1. An arrangement of an automotive motor multiple passenger vehicle wheel comprising:

a wheel disc having a central body with a pilot aperture encircled by concentric lug receiving apertures;

a drum having inboard and outboard extreme ends, said drum being fixably connected to said wheel disc;

an outboard tire bead seat along an outer diameter of an outboard extreme end of one of said wheel disc and said drum;

an inboard tire bead seat along an outer diameter of said drum inboard extreme end;

an outboard reinforcement ring having an outer diameter connected to an inner diameter of said outboard tire bead seat; and

an inboard reinforcing ring having an outer diameter connected to an inner diameter of said inboard tire bead seat, said inboard reinforcing ring having an inner diameter significantly larger than an inner diameter of said outboard reinforcement ring and said inboard reinforcement ring having a radial width significantly smaller than a radial width of said outboard reinforcement ring.

2. An arrangement as described in Claim 1 wherein said outboard reinforcement ring is welded to said outboard tire seat.

3. An arrangement as described in Claim 1 wherein said inboard reinforcement ring is welded to said inboard tire seat.

4. An arrangement of a wheel as described in Claim 1 wherein said outboard reinforcement ring is generally continuously welded to said outboard tire bead seat.

5. An arrangement of a wheel as described in Claim 1 wherein said inboard reinforcement ring is generally continuously welded to said inboard tire bead seat.

6. An arrangement of a wheel as described in Claim 1 wherein said outboard reinforcement ring has apertures to allow for the removal of entrapped moisture.

7. An arrangement of a wheel as described in Claim 1 wherein said inboard reinforcement ring has apertures to allow for removal of entrapped moisture between said inboard reinforcement ring and said drum.

8. An arrangement of a wheel as described in Claim 1 wherein said outboard reinforcement ring inner diameter is smaller than an outer diameter of said wheel disc.

9. An arrangement of a wheel as described in Claim 1 wherein said wheel disc has spoke holes and wherein said spoke holes have an outer diameter and wherein said outboard reinforcement ring inner diameter is smaller than said spoke holes' outer diameter.

10. An arrangement of a wheel as described in Claim 1 wherein said inboard reinforcement ring inner diameter is larger than said an outer diameter of said wheel disc.

11. An arrangement of a wheel as described in Claim 1 wherein said outboard reinforcement ring and said inboard reinforcement ring have a generally equal outer diameters.

12. A wheel arrangement as described in Claim 1 wherein said wheel drum is welded to said wheel disc.

13. A wheel arrangement as described in Claim 1 wherein said drum is integrally cast with said wheel disc.

14. An arrangement of a wheel as described in Claim 1 wherein a ratio of radial width of said inboard reinforcement ring to said outboard reinforcement ring is generally equal to one half or less.

15. An arrangement of a wheel as described in Claim 1 wherein an outboard extreme end of said drum is connected with said wheel disc and a portion of said wheel disc forms said outboard tire bead seat.

16. An arrangement of a wheel as described in Claim 1 wherein a ratio of thickness between said outboard reinforcement ring to a thickness of said drum is between 1:1.5 to 1: .75.

17. An arrangement of an automotive motor multiple passenger vehicle wheel comprising:

- a wheel disc having a central body with a pilot aperture encircled by concentric lug receiving apertures;

- a drum having inboard and outboard extreme ends, said drum being fixably connected to said wheel disc;

- an outboard tire bead seat along an outer diameter of an outboard extreme end of one of said wheel disc and said drum;

- an inboard tire bead seat along an outer diameter of said drum inboard extreme end;

- an outboard reinforcement ring fastener connected to an inner diameter of said outboard tire bead seat; and

an inboard reinforcing ring connected to an inner diameter of said inboard tire bead seat, said inboard reinforcing ring having an inner diameter significantly larger than an inner diameter of said outboard reinforcement ring and said inboard reinforcement ring having a radial width significantly smaller than a radial width of said outboard reinforcement ring.

18. An arrangement of a wheel as described in Claim 17 wherein said fasteners are bolts.

19. An arrangement of a wheel as described in Claim 17 wherein said fasteners are connected to an outer radial half of said outboard reinforcement ring to said outboard tire bead seat.

20. A wheel arrangement as described in Claim 1 wherein said outboard tire bead seat has a radially inward extending flange portion to support said outboard reinforcement ring.

21. An arrangement of a wheel as described in Claim 1 wherein said inboard reinforcement ring is fastener connected to said drum.

22. An arrangement of a wheel as described in Claim 21 wherein said fastener is a bolt.

23. An arrangement of an automotive motor multiple passenger vehicle wheel comprising:

a wheel disc having a central body with a pilot aperture encircled by concentric lug receiving apertures, said wheel disc further having an outer diameter surface;

a drum having inboard and outboard extreme ends, said drum having along an outer diameter surface tire bead seats along inboard and outboard extreme ends, said drum being fixably connected to said wheel disc outer diameter surface along an inner diameter surface of said drum between said inboard and outboard extreme ends of said drum;

an outboard reinforcement ring having an outer diameter welded to said inner diameter surface of said drum adjacent said outboard extreme end of said drum; said outboard reinforcement ring having an inner diameter less than an outer diameter of said wheel disc; and

an inboard reinforcing ring having an inner diameter welded to said inner diameter surface of said drum adjacent said drum extreme inboard end, said inboard reinforcing ring having an inner diameter significantly larger than said outboard reinforcement ring inner diameter and said outboard reinforcement ring having a radial width significantly smaller than a radial width of said outboard reinforcement ring.

24. An arrangement of an automotive multiple passenger vehicle wheel comprising:

a wheel disc having a central body with a central pilot aperture, said pilot aperture being encircled by concentric lug receiving apertures, said wheel disc having an outer diameter surface and said wheel disc having spoke holes with an outer diameter surface;

a drum with inboard and outboard extreme ends, said drum having an outer diameter surface with tire bead seats along said drum extreme inboard and outboard ends said drum being weldably connected to said wheel disc outer diameter surface between said drum inboard and outboard extreme ends;

an outboard reinforcement ring having an outer diameter generally continuously welded to said inner diameter surface of said drum adjacent to said extreme outboard end of said drum, said wheel reinforcement ring having an inner diameter less than said outer diameter of said wheel disc spoke holes, said outboard reinforcement ring having apertures to allow for the removal of entrapped moisture between said outboard reinforcement ring and said drum; and

an inboard reinforcement ring having an outer diameter generally continuously welded to said inner diameter surface of said drum adjacent to said drum extreme inboard end, said inboard reinforcement ring having an outer diameter generally equal to an outer diameter of said outboard reinforcement ring and said inboard reinforcement ring having an inner diameter significantly larger than said outboard reinforcement ring inner diameter and wherein said inboard reinforcement ring inner diameter has a diameter greater than an outer diameter of said wheel disc and said outboard reinforcement ring having a radial width less than one-half of a radial width of the said outboard reinforcement ring.